



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Attorney Docket No.: P-633 (TI-0020)
Inventors: Taylor and Yu
Serial No.: 09/873,645
Filing Date: June 4, 2001
Examiner: Sheinberg, Monika B.
Group Art Unit: 1634
Title: Analysis of Data From Liquid
Chromatographic Separation of DNA

CERTIFICATE UNDER 37 CFR 3.73(b)

Transgenomic, Inc., a corporation certifies that it is the assignee of the entire right, title and interest in the patent application identified above by virtue of an assignment from the inventor(s) of the patent application identified above. The assignment is attached.

The undersigned has reviewed all the documents in the chain of title of the patent application identified above and, to the best of the undersigned's knowledge and belief, title is in the assignee identified above.

The undersigned (whose title is supplied below) is empowered to sign this certificate on behalf of the assignee.

I hereby declare that all statements made herein of my own belief are true, and that all statements made on information and belief are believed to be true; and further, that these statements are made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment or both, under Section 1001, Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issuing thereon.

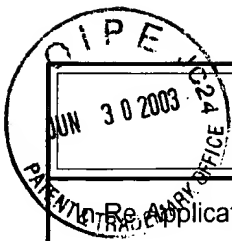
J. A. Johnson
Signature

06.04.03
Date

VP General Counsel
Typed or printed name

Keith A. Johnson
Title

LAW DEPARTMENT
TRANSGENOMIC, INC.
12325 Emmet St.
Omaha, NE 68164



1634-

**TRANSMITTAL LETTER
(General - Patent Pending)**

Docket No.
P-633 (TI-0020)

Re Application Of: **Taylor and Yu**

Serial No.
09/873,645

Filing Date
June 4, 2001

Examiner
Sheinberg, Monika B.

Group Art Unit
1634 ✓

Title: **Analysis of Data From Liquid Chromatographic Separation of DNA**

TO THE COMMISSIONER FOR PATENTS:

Transmitted herewith is:

Executed Power of Attorney with Revocation; Executed Certificate Under 37 CFR 3.73 (b)

in the above identified application.

- ☒ No additional fee is required.
- ☐ A check in the amount of _____ is attached.
- ☒ The Director is hereby authorized to charge and credit Deposit Account No. **50-1619** as described below.
- ☐ Charge the amount of _____
- ☒ Credit any overpayment.
- ☒ Charge any additional fee required.

Jane Massey Licata

Signature

Dated: **June 26, 2003**

Jane Massey Licata, Reg. No. 32,257

**Licata & Tyrrell P.C.
66 East Main Street
Marlton, N.J. 08053
Tel : 856-810-1515
Fax: 856-810-1454**

I certify that this document and fee is being deposited on June 26, 2003 with the U.S. Postal Service as first class mail under 37 C.F.R. 1.8 and is addressed to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

Jane Massey Licata
Signature of Person Mailing Correspondence

Jane Massey Licata
Typed or Printed Name of Person Mailing Correspondence

CC:



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Attorney Docket No.: P-633 (TI-0020)
Inventors: Taylor and Yu
Serial No.: 09/873,645
Filing Date: June 4, 2001
Examiner: Sheinberg, Monika B.
Group Art Unit: 1634
Title: Analysis of Data From Liquid
Chromatographic Separation of DNA

Mail Stop
Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Dear Sir:

POWER OF ATTORNEY WITH REVOCATION

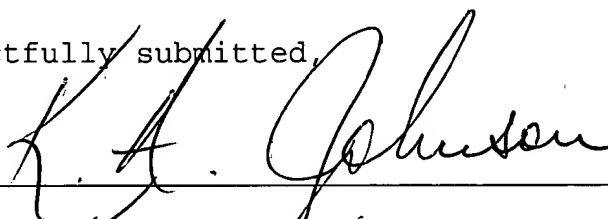
Revoking any and all powers of attorney heretofore given in the matter of the above-entitled application, the undersigned, assignee of the entire interest in the above-identified application, hereby appoints, Keith A. Johnson, Registration No. 53,079 of Omaha, NE and Licata & Tyrrell P.C., Jane Massey Licata, Registration No. 32,257, Kathleen A. Tyrrell, Registration No. 38,350, Laura Plunkett, Registration No. 45,015, and, Bridget C. Sciamanna, Registration No. 47,333, of Marlton, New Jersey, as attorney, with full power of substitution and revocation, to prosecute this application, to make alterations and amendments therein, to receive the patent, and to transact all business in the Patent and Trademark Office connected therewith.

Send all future correspondence and address all telephone calls
to:

Jane Massey Licata, Esquire
Licata & Tyrrell P.C.
66 E. Main Street
Marlton, New Jersey 08053
Phone: (856) 810-1515
Fax: (856) 810-1454

Respectfully submitted,

Name:
Title:


Keith A. Johnson
V.P. General Counsel

Date: 06.04., 2003

**LAW DEPARTMENT
TRANSGENOMIC, INC.
12325 Emmet St.
Omaha, NE 68164**

UNITED STATES PATENT AND TRADEMARK OFFICE

Assignee: Transgenomic, Inc.

Examiner: N/A

Serial No.: 09/873,645

Art Unit: N/A

Filing Date: 06/04/2001

Title: ANALYSIS OF DATA FROM LIQUID CHROMATOGRAPHIC SEPARATION OF DNA

Box ASSIGNMENTS

Assistant Commissioner of Patents and Trademarks
Washington, D.C. 20231

Sir:

ASSIGNMENT

KNOW ALL MEN BY THESE PRESENTS, that Whereas we, Paul D. Taylor and Elisa Yu, invented certain new and useful improvements in **ANALYSIS OF DATA FROM LIQUID CHROMATOGRAPHIC SEPARATION OF DNA**, and have disclosed the same in an application for Letters Patent, Serial No. **09/873,645**, filed in the United States Patent and Trademark Office on **06/04/2001**; and

WHEREAS **TRANSGENOMIC, INC.**, a corporation duly organized and existing under the laws of **DELAWARE**, and having a post office address at **2032 CONCOURSE DRIVE, SAN JOSE, CA 95131** is desirous of acquiring an interest therein and in the Letters Patent to be obtained therefor from the United States Patent and Trademark Office;

NOW THEREFORE, in consideration of the sum of one dollar (\$1.00) and other good and valuable considerations to us by **TRANSGENOMIC, INC.**, the receipt whereof is hereby acknowledged, We do hereby sell, assign, transfer and set over unto **TRANSGENOMIC, INC.**, its successors and assigns, the entire right, title and interest in, to and under the said application for United States Letters Patent, including all priority rights arising therefrom, all inventions

therein disclosed, and any and all Letters Patent of the United States and of all other countries which may be granted for the said inventions, or any of them.

TO HAVE, HOLD and ENJOY the said inventions, the said Application, and the said Letters Patent to said **TRANSGENOMIC, INC.**, its successors and assigns, to its and their own use and behoof to the full end of the term or terms for which the said Letters Patent may be granted as fully and entirely as the same would have been held and enjoyed by us had this assignment and sale not been made.

And We do hereby authorize and request the Commissioner of Patents of the United States to issue any United States Letters Patent which may be granted on the said application, or any original, divisional, reissue, continuation, or provisional applications, or for the said inventions of any of them, to said **TRANSGENOMIC, INC.**, its successors and assigns, as assignees of the entire right, title and interest therein and thereto.

And We do hereby, for ourselves and for our legal representatives, covenant and agree with **TRANSGENOMIC, INC.**, its successors and assigns, that We have granted to others no license to make, use or sell any of the said inventions, that our right, title and interest in the said inventions has not been encumbered, that We have good right and title to sell and assign the same, and that We will not execute any instrument in conflict herewith.

And We do hereby, for ourselves and for our legal representatives, further covenant and agree with **TRANSGENOMIC, INC.**, its successors and assigns, that upon request We will, and they shall, execute original, divisional, reissue, continuation, or provisional applications, amended specifications, or rightful oaths; communicate to **TRANSGENOMIC, INC.**, its successors and assigns, any facts known to us relating to the said inventions or the history thereof; execute preliminary statements and testify in any interference proceedings; execute and

UNITED STATES PATENT AND TRADEMARK OFFICE

Assignee: Transgenomic, Inc. : Examiner: N/A
Serial No.: 09/873,645 : Art Unit: N/A
Filing Date: 06/04/2001 :
Title: ANALYSIS OF DATA FROM LIQUID CHROMATOGRAPHIC SEPARATION OF
DNA

Box ASSIGNMENTS
Assistant Commissioner of Patents and Trademarks
Washington, D.C. 20231

Sir:

ASSIGNMENT

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Trademark Office on **06/04/2001**; and

WHEREAS **TRANSGENOMIC, INC.**, a corporation duly organized and existing under
the laws of **DELAWARE**, and having a post office address at **2032 CONCOURSE DRIVE,
SAN JOSE, CA 95131** is desirous of acquiring an interest therein and in the Letters Patent to
be obtained therefor from the United States Patent and Trademark Office;

NOW THEREFORE, in consideration of the sum of one dollar (\$1.00) and other good
and valuable considerations to us by **TRANSGENOMIC, INC.**, the receipt whereof is hereby
acknowledged, We do hereby sell, assign, transfer and set over unto **TRANSGENOMIC, INC.**,
its successors and assigns, the entire right, title and interest in, to and under the said application
for United States Letters Patent, including all priority rights arising therefrom, all inventions

therein disclosed, and any and all Letters Patent of the United States and of all other countries which may be granted for the said inventions, or any of them.

TO HAVE, HOLD and ENJOY the said inventions, the said Application, and the said Letters Patent to said **TRANSGENOMIC, INC.**, its successors and assigns, to its and their own use and behoof to the full end of the term or terms for which the said Letters Patent may be granted as fully and entirely as the same would have been held and enjoyed by us had this assignment and sale not been made.

And We do hereby authorize and request the Commissioner of Patents of the United States to issue any United States Letters Patent which may be granted on the said application, or any original, divisional, reissue, continuation, or provisional applications, or for the said inventions of any of them, to said **TRANSGENOMIC, INC.**, its successors and assigns, as assignees of the entire right, title and interest therein and thereto.

And We do hereby, for ourselves and for our legal representatives, covenant and agree with **TRANSGENOMIC, INC.**, its successors and assigns, that We have granted to others no license to make, use or sell any of the said inventions, that our right, title and interest in the said inventions has not been encumbered, that We have good right and title to sell and assign the same, and that We will not execute any instrument in conflict herewith.

And We do hereby, for ourselves and for our legal representatives, further covenant and agree with **TRANSGENOMIC, INC.**, its successors and assigns, that upon request We will, and they shall, execute original, divisional, reissue, continuation, or provisional applications, amended specifications, or rightful oaths; communicate to **TRANSGENOMIC, INC.**, its successors and assigns, any facts known to us relating to the said inventions or the history thereof; execute preliminary statements and testify in any interference proceedings; execute and

deliver any application papers, assignments, or other instruments, and do all other acts which, in the opinion of counsel for **TRANSGENOMIC, INC.**, may be necessary or convenient to secure the grant of Letters Patent to **TRANSGENOMIC, INC.**, its successors and assigns, or its nominees, in the United States and in all other countries where **TRANSGENOMIC, INC.** may desire to have the said inventions, or any of them, patented, with specifications and claims in such form as shall be approved by counsel for **TRANSGENOMIC, INC.**, and to vest and confirm in **TRANSGENOMIC, INC.**, its successors and assigns, or its nominees, the full and complete legal and equitable title to all such Letters Patent, without further consideration than now paid but at the expense of **TRANSGENOMIC, INC.**, its successors and assigns.

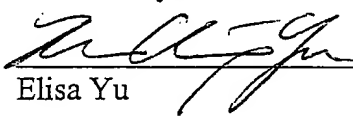
The undersigned hereby grant to WILLIAM B. WALKER, Registration No. 22,498, Transgenomic, Inc., the power to insert on this Assignment any further identification which may be necessary or desirable in order to comply with the rules of the United States Patent and Trade-mark Office for recordation of this document.

IN WITNESS WHEREOF, We have hereunto set our hands and seals on the dates indicated below:

Date: _____

Date: 10/23/01

Paul D. Taylor



Elisa Yu

STATE OF _____)
) ss.
COUNTY OF _____)

On this _____ day of _____ in the year _____ before me,
_____, a Notary Public in and for said State, personally appeared _____

- ☐ personally known to me -OR-
☐ proved to me on the basis of satisfactory evidence

to be the person whose name is subscribed to the within instrument, and acknowledge
that he/she executed the same in his/her authorized capacity, and that by his/her signature on the
instrument the person, to the entity upon behalf of which the person acted, executed the
instrument.

WITNESS my hand and Official Seal.

Signature of Notary
Notary for the State of _____
Residing in _____
My Commission expires _____

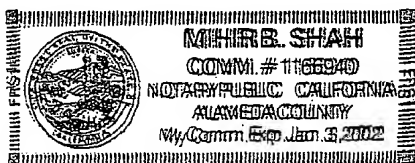
STATE OF CALIFORNIA)
) ss.
COUNTY OF Alameda)

On this 23rd day of Oct. in the year 2001 before me,
Mihir B. Shah, a Notary Public in and for said State, personally appeared ELISA YU

- ☐ personally known to me -OR-
☒ proved to me on the basis of satisfactory evidence

to be the person whose name is subscribed to the within instrument, and acknowledge
that he/she executed the same in his/her authorized capacity, and that by his/her signature on the
instrument the person, to the entity upon behalf of which the person acted, executed the
instrument.

WITNESS my hand and Official Seal.



Mihir B. Shah
Signature of Notary
Notary for the State of CALIFORNIA
Residing in 40087 missions Blvd Fremont, CA
My Commission expires 1/3/2002 94539

STATE OF CALIFORNIA)

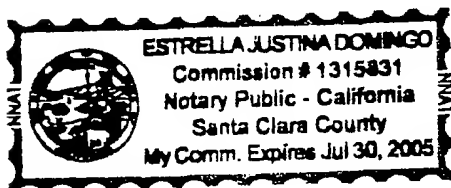
COUNTY OF SANTA CLARA) ss.

On this 28th day of AUGUST in the year 2001 before me,
ESTRELLA J. DOMINGO, a Notary Public in and for said State, personally appeared PAUL D. TAYLOR

- ☐ personally known to me -OR-
☒ proved to me on the basis of satisfactory evidence

to be the person whose name is subscribed to the within instrument, and acknowledge that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, to the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and Official Seal.



[Signature]
Signature of Notary
Notary for the State of CALIFORNIA
Residing in SAN JOSE
My Commission expires 7/30/2005

STATE OF _____)

COUNTY OF _____) ss.

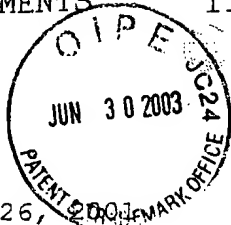
On this _____ day of _____ in the year _____ before me,
_____, a Notary Public in and for said State, personally appeared _____

- ☐ personally known to me -OR-
☐ proved to me on the basis of satisfactory evidence

to be the person whose name is subscribed to the within instrument, and acknowledge that he/she executed the same in his/her authorized capacity, and that by his/her signature on the instrument the person, to the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and Official Seal.

Signature of Notary
Notary for the State of _____
Residing in _____
My Commission expires _____



P-63

UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
ASSISTANT SECRETARY AND COMMISSIONER
OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

NOVEMBER 26, 2001

PTAS

TRANSGENOMIC, INC.
WILLIAM B. WALKER
2032 CONCOURSE DRIVE
SAN JOSE, CA 95131

CALENDARED

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700008774A

UNITED STATES PATENT AND TRADEMARK OFFICE
NOTICE OF RECORDATION OF ASSIGNMENT DOCUMENT

THE ENCLOSED DOCUMENT HAS BEEN RECORDED BY THE ASSIGNMENT DIVISION OF THE U.S. PATENT AND TRADEMARK OFFICE. A COMPLETE MICROFILM COPY IS AVAILABLE AT THE ASSIGNMENT SEARCH ROOM ON THE REEL AND FRAME NUMBER REFERENCED BELOW.

PLEASE REVIEW ALL INFORMATION CONTAINED ON THIS NOTICE. THE INFORMATION CONTAINED ON THIS RECORDATION NOTICE REFLECTS THE DATA PRESENT IN THE PATENT AND TRADEMARK ASSIGNMENT SYSTEM. IF YOU SHOULD FIND ANY ERRORS OR HAVE QUESTIONS CONCERNING THIS NOTICE, YOU MAY CONTACT THE EMPLOYEE WHOSE NAME APPEARS ON THIS NOTICE AT 703-308-9723. PLEASE SEND REQUEST FOR CORRECTION TO: U.S. PATENT AND TRADEMARK OFFICE, ASSIGNMENT DIVISION, BOX ASSIGNMENTS, CG-4, 1213 JEFFERSON DAVIS HWY, SUITE 320, WASHINGTON, D.C. 20231.

RECORDATION DATE: 11/19/2001

REEL/FRAME: 012176/0477
NUMBER OF PAGES: 9

BRIEF: ASSIGNMENT OF ASSIGNOR'S INTEREST (SEE DOCUMENT FOR DETAILS).

ASSIGNOR:

TAYLOR, PAUL D.

DOC DATE: 08/28/2001

ASSIGNOR:

YU, ELISA

DOC DATE: 10/23/2001

ASSIGNEE:

TRANSGENOMIC, INC.
2032 CONCOURSE DRIVE
SAN JOSE, CALIFORNIA 95131

SERIAL NUMBER: 09873645
PATENT NUMBER:FILING DATE: 06/04/2001
ISSUE DATE:

TONYA LEE, EXAMINER
ASSIGNMENT DIVISION
OFFICE OF PUBLIC RECORDS

NOV. 19. 2001

TRANSGENOMIC 408 432 8910

NO. 316 P. 2/10

11/19/2001

700008774

Document No.: P-633

FORM PTO-1526 (Modified)
(Rev. 8-93)
OMB No. 0851-0011 (exp. 4/94)
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RECORDATION FORM COVER SHEET

U.S. DEPARTMENT OF COMMERCE
Patent and Trademark Office

PATENTS ONLY

Tab settings → → →

To the Honorable Commissioner of Patents and Trademarks: Please record the attached original documents or copy thereof.

1. Name of conveying party(ies):

PAUL D. TAYLOR

ELISA YU

2. Name and address of receiving party(ies):

Name: Transgenomic, Inc.Address: 2032 Concourse Drive

Additional names(s) of conveying party(ies)

☐ Yes ☒ No

3. Nature of conveyance:

☒ Assignment☐ Merger☐ Security Agreement☐ Change of Name☐ Other _____City: San JoseState/Prov.: CACountry: USAZIP: 95131

Execution Date: _____

Additional name(s) & address(es)

☐ Yes ☒ No

4. Application number(s) or registration numbers(s):

If this document is being filed together with a new application, the execution date of the application is: _____

Patent Application No.

Filing date

B. Patent No.(s)

09/873,645

06/04/2001

Additional numbers

☐ Yes ☒ No

5. Name and address of party to whom correspondence concerning document should be mailed:

Name: William B. WalkerRegistration No. 22,498Address: Transgenomic, Inc.2032 Concourse DriveCity: San JoseState/Prov.: CACountry: USAZIP: 95131

6. Total number of applications and patents involved:

1

7. Total fee (37 CFR 3.41):.....\$ 40.00☒ Enclosed - Any excess or insufficiency should be credited or debited to deposit account☒ Authorized to be charged to deposit account

8. Deposit account number:

50-0821

DO NOT USE THIS SPACE

9. Statement and signature.

To the best of my knowledge and belief, the foregoing information is true and correct and any attached copy is a true copy of the original document.

JOHN F. BRADY

Name of Person Signing

Signature

19 NOV 01

Date

Total number of pages including cover sheet, attachments, and